Remarks

Claims 1, 3-5, 12, 19, 31, 32 and 36 have been amended as shown above. Antecedent basis for the amendments may be found in the specification at, e.g., page 4, line 17 through page 6, line 2 and page 7, lines 15-28. Following entry of this amendment, claims 1, 3-19 and 31-40 will be pending in this application.

Rejection of Claims 1, 3-19 and 31-40 under 35 U.S.C. §112

Claims 1, 3-19 and 31-40 were rejected under 35 U.S.C. §112, second paragraph as being indefinite on grounds that:

> *"Independent claims 1 and 31 have been amended to recite that the topcoat is a "mixed two-part curable composition". It is unclear what is meant by "mixed" - what is the composition mixed with in this instance?*
>
> *"Independent claims 1 and 31 have been further amended to recite that the "topcoat is "sufficiently strip agent permeable" when "subjected to the action of a suitable strip agent". What is a suitable strip agent? How does one determine whether a strip agent is suitable or not?*
>
> *"Appropriate correction of clarification is required."* (see the Final Rejection at page 2, numbered paragraph 2).

Reconsideration is requested in view of the above amendments and the following further explanation.

A "mixed" two part composition is a mixture of the two parts with one another to form a composition that cures or hardens after the two parts are mixed. Claims 1 and 31 have been amended to clarify this aspect. Persons having ordinary skill in the art will readily understand the term "mixed" as recited in the claims.

The specification discusses a variety of exemplary strip agents (see e.g., page 6, line 19 through page 7, line 8 and page 9, line 19 through page 10, line 22), their use (see e.g., page 8, lines 4-22) and their evaluation (see e.g., page 10, line 25 through page 11, line 19). This will readily enable a person having ordinary skill in the art to select a strip agent.

Applicants accordingly request withdrawal of the 35 U.S.C. §112, second paragraph rejection of claims 1, 3-19 and 31-40.

Rejection of Claims 1, 3-19 and 31-40 under 35 U.S.C. §102(b)

Claims 1, 3-19 and 31-40 were rejected under 35 U.S.C. §102(b) as being anticipated by Published PCT Application No. WO 98/11168 (Hamrock et al.), on grounds that:

"Hamrock et al. disclose a floor finishing system comprising a radiation curable composition and a primer composition wherein the primer composition is coatable over a substrate and the radiation curable composition is coatable thereon (Page 6, lines 25-30). The radiation curable coating comprises a polyfunctional isocyanurate and a hydroxyalkyl acrylate (Page 4, lines 21 -30). A preferred monomer is shown on Page 5 arid contains an aromatic group ***(thus meeting the limitations that the topcoat composition comprises an acrylated urethane or an aromatic urethane)****. The cured, coatable composition is readily strippable from the substrate when the latex primer is present (Page 7, lines 1-3). In applying the coating compositions of the invention to a suitable substrate, it is preferred that the composition be applied in a manner which creates a coating no greater than about 1.3 mm in thickness (Page 18, lines 29-31). With regards to the stripability rating limitations recited in claims 7 and 16, the Examiner takes the position that such property limitations must be inherently present in the coatings taught by Hamrock et al. given that the chemical composition of the coatings and the structure of the laminate as taught by Hamrock et al. and as claimed in the instant application is identical. All limitations of the claimed invention are either disclosed or inherent in the above reference."* (see the Final Rejection at pages 3-4, numbered paragraph 3) and on the further grounds that:

"Applicants traverse the rejection of claims 1, 3-19 and 31-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Hamrock et al. (WO 98/11168) and state that claim 1 addresses the coated floor after the topcoat has been applied and

before it cures and hardens. However, the Examiner would like to point out that the language recited in independent claim 1 does not preclude the topcoat from being cured and hardened and hence claim 1 recites a coated floor wherein the topcoat is already cured/hardened. Applicants further state that the topcoat of the instant application cures/hardens on its own time in a short period of time whereas Hamrock's UV curable composition does not harden until after exposure to suitable radiation. Again, the Examiner would like to point out that the language of claim 1 does not preclude the use of radiation and hence includes topcoats that are UV curable. Furthermore, in response to the Examiner's position that the use of a two-part composition does not impart distinctive structural characteristics to the final product, Applicants direct the Examiner's attention to the Declaration filed by Robert D. P. Hei under 37 CFR 1.132 and state that the Declaration shows that the vinyl composition flooring tiles coated with a single layer of PADLOCK acrylic polymer floor finish and over coated with a two-component aqueous polyurethane composition exhibited better leveling and hardened finish appearance than the other comparative samples. However, the Examiner would like to point out that even if she agreed that the Hei Declaration shows that with a single layer of PADLOCK acrylic polymer floor finish and over coated with a two-component aqueous polyurethane composition exhibited better leveling and hardened finish appearance ***that is not the invention being claimed in the instant application. None of the claims are directed to an invention commensurate in scope with the showing in the Hei Declaration or the Specification.*** *The Examiner invites the Applicants to amend the claims to recite an invention commensurate in scope with the showing in the Hei Declaration and the Specification. A claim reciting a coated floor with a strippable intermediate coating and a mixed two part curable composition is simply not the same as a vinyl floor tile coated with a* ***single layer of PADLOCK acrylic polymer floor finish and over coated with a two-component aqueous polyurethane composition.***" (see the Final Rejection at pages 5-6).

Reconsideration is requested. Amended claim 1 recites a coated resilient floor with a mixed two-part curable or hardenable topcoat which is atop an intermediate layer and which "will cure or harden after the two parts are mixed and applied". Such a topcoat has not yet cured or hardened and may in the interest of brevity be referred to in the remainder of this amendment as a "two-part topcoat".

Hamrock et al. do not employ a two-part topcoat. Hamrock et al. employ a one-part, 100% solids UV curable topcoat.

Applicants have amended the rejected claims generally along the lines recommended by the Examiner, but with some differences to avoid unfairly narrowing the claims:

Applicants' claims continue to refer to a "resilient floor" rather than to "vinyl floor tile" as recommended in the Final Rejection. Applicants note in this regard that resilient floors generally are less durable than non-resilient floors and thus are more easily damaged by aggressive removal techniques such as floor sanding or aggressive burnishing (see e.g., page 1, lines 16-18). A person having ordinary skill in the art would readily understand from applicants' specification and from the Hei Declaration that the disclosed coatings could provide a strippable floor finish not only on vinyl floor tiles but also on other resilient floors such as the "vinyl flooring, vinyl composite flooring, and synthetic sports floors" discussed at page 4, lines 17-18 of the specification.

Applicants' amended claims refer to an "acrylic" intermediate coating (which may be made from one or many layers) rather than a "single layer of PADLOCK acrylic polymer floor finish" as recommended in the Final Rejection. A person having ordinary skill in the art would readily understand from applicants' specification and from the Hei Declaration that the disclosed coatings could provide a strippable floor finish using not only a single layer of PADLOCK acrylic adhesive but also using more than one layer of any of a variety of acrylic polymers including those discussed or exemplified at page 4, line 22 through page 5, line 11, page 7, lines 19-20 and page 8, lines 31-32.

Applicants' amended claims refer to a "urethane or acrylate topcoat" and a "mixed two-part composition" rather than a "two-component aqueous polyurethane composition" as

recommended in the Final Rejection. A person having ordinary skill in the art would readily understand from applicants' specification and from the Hei Declaration that the disclosed coatings could provide a strippable floor finish not only by using a two-component aqueous polyurethane composition but also by using a "urethane or acrylate" topcoat including those discussed or exemplified at page 5, line 24 through page 6, line 15 and in the Hei Declaration.

Applicants accordingly request withdrawal of the 35 U.S.C. §102(b) rejection of claims 1, 3-19 and 31-40 as being anticipated by Hamrock et al.

Rejection of Claims 1, 5, 7, 9-11, 15, 16 and 31-35 under 35 U.S.C. §102(b)

Claims 1, 5, 7, 9-11, 15, 16 and 31-35 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,932,350 (Lauer et al.), on grounds that:

> *"Lauer et al. (US 5,932,350) disclose a method for tandem coating substrate, such as cellulosic substrates, with both highly crosslinked thermoset coatings and aqueous based coatings (Column 1, lines 1-9). The substrate may be coated first with the cured coating (ii) and then the highly crosslinked coating (i) which is preferably formed from a thermoset material that is UV curable and which before cure may be a high solids composition or a waterborne composition (Column 2, lines 31-51). The UV curable coatings, after exposure to UV radiation, produce highly crosslinked coatings. It has proved difficult to adhered water-based topcoats without the use of an intermediate coating (Column 3, lines 1-6). With regards to the stripability rating limitations recited in claims 7 and 16, the Examiner takes the position that such property limitations must be inherently present in the coatings taught by Lauer et al. given that the chemical composition of the coatings and the structure of the laminate as taught by Lauer et al. and as claimed in the instant application is identical. All limitations of the claimed invention are either disclosed or inherent in the above reference."* (See the Final Rejection at page 4, numbered paragraph 4)

and on the further grounds that:

"Applicants traverse the rejection of Claims 1, 5, 7, 9-1 1, 15, 16, 31-35 under 35 U.S.C. 102(b) as being anticipated by Lauer et al. (US 5932,350) and state that Lauer's coatings are "highly cross linked" and are "carbonyl functional" and that Lauer does not state that the coatings "can be stripped without damaging the floors". First, the Examiner would again like to point out that the language of the independent claim does not preclude the topcoat from being "highly cross linked" and/or "carbonyl functional". Second, Lauer's coatings must inherently be strippable "without damaging the floors" given that Lauer teaches the same coatings as claimed by the instant Applicants. Applicants further state that none of Lauer's working examples show a coated floor of the claimed invention. However, "the use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain". In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)). A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including nonpreferred embodiments. Merck & Co. v. Biocraft Laboratories, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989). See also Celeritas Technologies Ltd. v. Rockwell International Corp., 150 F.3d 1354, 1361, 47 USPQ2d 1516, 1522-23 (Fed. Cir. 1998). Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." In re Gurley, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994)." (See the Final Rejection at pages 7-8).

Reconsideration is requested. When applicants said that:

Lauer et al.'s coating (i) is said to be "highly crosslinked" and "preferably formed from a thermoset material" (see e.g., col. 2, lines 46-47) but Lauer et al. do not say that coating (i) "can be stripped without damaging the floor".

and that:

Lauer et al.'s waterbased or aqueous coating (ii) is said to be "carbonyl functional" (see e.g., col. 3, lines 9-16) and "preferably a thermoplastic or substantially uncrosslinked copolymer when it is applied (in its uncured state) to the substrate" (see e.g., col. 4, lines 38-39) but Lauer et al. do not say that the oven-dried coating (ii) "can be stripped without damaging the floor".

applicants were not saying that their own topcoat (once cured or hardened) could not be "highly crosslinked" or that their own intermediate coating could not be "carboxyl functional". Applicants were merely describing Lauer et al.

Applicants do not agree that Lauer et al.'s coatings "must inherently be strippable "without damaging the floors"" as asserted in the Final Rejection. Lauer et al. say that their coatings are "highly crosslinked" and they cure them using a UV line processor. A person having ordinary skill in the art would expect that such a coating could not be stripped without damaging flooring, especially resilient flooring (see e.g., page 1, lines 10-18).

Applicants agree that "A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including nonpreferred embodiments", but note that the recited standard would be applicable to a 35 U.S.C. §103 rather than a 35 U.S.C. §102 rejection. In addition, this standard must be applied fairly, including proper application of the terms "reasonably suggested" and "the art". Applicants do not agree that Lauer et al. would be consulted by a person having ordinary skill in the relevant art. The relevant art does not involve all coating compositions or all coating applications. A person having ordinary skill in the relevant art would be interested in applying a finish that "can be stripped" to a "resilient floor". Lauer et al. has nothing to do with strippable finishes or floors, let alone resilient floors.

The rejected clams do not merely recite two coatings. Claim 1 recites a combination of resilient flooring, a strippable intermediate acrylic coating atop the flooring, and a curable or hardenable urethane or acrylate topcoat atop the intermediate coating, and further recites that the topcoat after drying or hardening is "less strippable and more durable than the intermediate coating, and sufficiently strip agent-permeable so that when the topcoat is subjected to the action of the strip agent the topcoat and intermediate coating can be stripped without damaging the flooring". Lauer et al. say nothing regarding the relative strippability or durability of their coatings and nothing regarding strip agents or flooring damage during stripping.

Lauer et al discuss many coating materials but do not provide any basis for selecting the combination recited in applicants' rejected claims. For example, all of Lauer et al.'s working examples (and Lauer et al.'s preferred application mode, see col. 5, lines 57-62) involve applying two layers of Lauer et al.'s "high solids" or "highly crosslinked" coating (i) onto hardboard, sanding, UV curing and applying a layer of Lauer et al.'s waterbased coating (ii). Lauer et al. say that the highly crosslinked coating seals the hardboard surface and that the waterbased coating provides a decorative layer (see e.g., col. 1, lines 11-24 and col. 5, lines 57-65). Lauer et al.'s working examples and preferred application mode do not involve a resilient floor, do not involve application of coatings in the order recited in the rejected claims, and do not disclose application atop an intermediate coating of a "mixed two-part composition that cures or hardens after the two parts are mixed and applied and which after drying or hardening is less strippable and more durable than the intermediate coating". Lauer et al.'s sanding step would be undesirable and would not normally be employed on (and could damage) resilient flooring. Lauer et al.'s working examples and preferred application mode could not fairly be said to "reasonably suggest" the coated resilient floor recited in the rejected claims and could not fairly be said to be part of the relevant art.

As previously noted Lauer et al. also say that in another embodiment:

"the cellulosic material is a paper material such as may be typically used in a printing or packaging application. Here, the waterbased coating (ii) may first be applied to

the substrate, such as in the form of an ink, and then the cured waterbased coating (ii) and substrate are both coated with the highly crosslinked coating".

"Printing or packaging" has nothing to do with resilient flooring and does not show or suggest the coated resilient floor of the rejected claims. Lauer et al.'s printing or packaging embodiment could not fairly be said to "reasonably suggest" the coated resilient floor recited in the rejected claims and could not fairly be said to be part of the relevant art.

Applicants accordingly request withdrawal of the 35 U.S.C. §102(b) rejection of claims 1, 5, 7, 9-11, 15, 16 and 31-35 as being anticipated by Lauer et al.

Rejection of Claims 1, 3-5, 7-12, 15-19 and 31-35 under 35 U.S.C. §102(b)

Claims 1, 3-5, 7-12, 15-19 and 31-35 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,494,707 (Wang et al.), on grounds that:

"Wang et al. disclose a resilient floor covering comprising of a resilient support surface and a resilient wear surface adhered to said support surface and comprising an underlying wear layer based coat and an overlying wear layer top coat adhered to said wear layer base coat (Column 3, lines 61-68). The wear layer top coat is a hard thermoset UV curable blend of acrylates (Column 4, lines 7-10). The wear layer base coat has a thickness of 0.7 to 3.0 mils and the wear layer top coat has a thickness of 0.1 to 0.5 mils (Column 8, lines 35-45). Conventional substrate layer comprises materials typical of substrate layers found in the flooring art and include vinyl compositions (Column 9, lines 59-66)." (see the Final Rejection at pages 4-5, numbered paragraph 5)

and on the further grounds that:

"Applicants traverse the rejection of Claims 1, 3-5, 7-12, 15-19, and 31-35 under 35 U.S.C. 102(b) as being anticipated by Wang et al. (US 5,494,707) and state that Wang does not teach that the floor can be "be stripped without damaging the floors". However, the Examiner takes the position that Wang's coatings must inherently be strippable "without damaging the floors" given that Wang teaches the

same coatings as claimed by the instant Applicants." (See the Final Rejection at page 8).

Reconsideration is requested. Wang et al.'s wear layer top coats appear to be 100% solids UV curable materials (see e.g., col. 9, lines 14-38, Example 5 at col. 16, lines 42-49 and Example 6 at col. 16, lines 64-67). They are not a two-part composition and do not anticipate the rejected claims.

Applicants accordingly request withdrawal of the 35 U.S.C. §102(b) rejection of claims 1, 3-5, 7-12 and 15-19 as being anticipated by Wang et al.

Conclusion

Applicants have made an earnest effort to address the rejections. The objected-to word "suitable" has been removed from claims 1 and 31. Applicants have also amended the rejected claims generally along the lines recommended by the Examiner, but with some differences to avoid unfairly narrowing the claims.

Hamrock et al. uses a one-part 100% solids radiation curable overcoat and does not anticipate the rejected claims. Lauer et al. does not show and could not fairly be said to "reasonably suggest" a coated resilient floor as recited in the rejected claims and could not fairly be said to be part of the relevant art. Wang et al.'s wear layer top coats appear to be 100% solids UV curable materials, not two-part compositions.

Withdrawal of the Final Rejection and passage of the application to the issue branch are requested. The Examiner is encouraged to telephone the undersigned attorney at 612-331-7412 to discuss any unresolved questions regarding this application.

Respectfully submitted on behalf of
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November 22, 2005

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